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Remarks

Claims 1, 36, 38 and 40 have been cancelled. Claim 41 is withdrawn. New claims 44-48 have been added. Applicant believes that claims 1, 36, 38 and 40 were clear as written. However, in an effort to speed prosecution, claims 1, 36, 38 and 40 have been cancelled and rewritten with amendments in the form of new claims 44-47, respectively. The amendments reflected in new claims 44-47 have been made for clarity and not for reasons related to patentability. Applicant retains the right to prosecute claims 1, 36, 38 and 40 in their original form. Support for new claims 44-48 can be found in general throughout Applicant's Specification, and in particular, for example, as follows: claims 44-47, original claims 1, 36, 38 and 40, respectively, and at page 5, lines 3-4, claim 48, original claim 1 and page 8, lines 8-9. No new matter has been added.

Applicant submits that the amendments to claims 42 and 43, which now depend from claim 44, render moot the rejection of claims 42 and 43 under 35 U.S.C. § 112, second paragraph, and requests that it be withdrawn.

Claims 2-10, 18-20, 26-30, 32-34, 37, and 42-44 stand rejected under 35 U.S.C. § 102(b) over Chmielewski U.S. 6,068,620 (the '620 patent).

The '620 patent discloses a disposable absorbent article that includes an absorbent core that includes a laminate of three layers in which the central fibrous layer includes superabsorbent polymer.

Claim 44, formerly claim 1, is directed to a disposable diaper having a core that includes a composite that includes from 10 % by weight to about 90 % by weight superabsorbent polymer, and a high loft nonwoven web that includes fibers, the nonwoven web being impregnated with the superabsorbent polymer, and the superabsorbent polymer having been formed in situ in the nonwoven web by impregnating the nonwoven web with an aqueous superabsorbent polymer precursor composition and drying the aqueous superabsorbent polymer precursor composition to form a superabsorbent polymer throughout the three dimensional matrix of the nonwoven web including along fibers of the nonwoven web and in the interstices of the nonwoven web. The '620 patent does not teach a high loft nonwoven web impregnated with superabsorbent polymer. The '620 patent further fails to teach a nonwoven web

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impregnated with superabsorbent polymer formed in situ such that the superabsorbent polymer is present throughout the three dimensional matrix of the nonwoven web including along fibers of the nonwoven web and in interstices of the nonwoven web. Instead the '620 patent discloses a laminate that includes a central absorbent layer (e.g., 340a) formed by combining particulate superabsorbent polymer and fibers, and then forming a layer from the mixture. The resulting layer of the '620 patent laminate includes discrete superabsorbent particles (SAP) strewn throughout the layer. The '620 patent defines the term "SAP" as particulate or fibrous superabsorbent polymer (see The '620 patent, col. 1, lines 9-10). The '620 patent further discloses that the SAP would normally tend to migrate out the side edges 350d, 352d of the central absorbing layers 350a, 352a but the tissue layer 348, which extends around the side edges 350d, 352d, of the laminates substantially prevents the lateral migration of the out of the side edges 350d, 352d (see, *Id.* at cols. 9, line 59-col. 10, line 7; *see also Id.* col. 8, line 60-col. 9, line 11). This further demonstrates the particulate and mobile nature of the SAP particles of the '620 patent. The presence of the SAP as discrete, individual superabsorbent particles in the layer of the '620 patent does not constitute superabsorbent polymer throughout the three dimensional matrix of the nonwoven web including along fibers of the nonwoven web and in the interstices of the nonwoven web. Thus, since the '620 patent fails to teach a high loft nonwoven web including a superabsorbent polymer throughout the three dimensional matrix of the nonwoven web including along fibers of the nonwoven web and in interstices of the nonwoven web, the '620 patent fails to teach the disposable diaper of claim 44. Applicant submits, therefore, that the rejection of claim 44 under 35 U.S.C. § 102(b) over the '620 patent is unwarranted and requests that it be withdrawn.

The '620 patent is further deficient for at least the following additional reasons. The superabsorbent polymer of claim 44 is formed in situ in the nonwoven web by impregnating the nonwoven web with an aqueous superabsorbent polymer precursor composition and drying the aqueous superabsorbent polymer precursor composition to form superabsorbent polymer throughout the three dimensional matrix of the nonwoven web including along the fibers of the nonwoven web and in interstices of the nonwoven web. The '620 patent does not teach a nonwoven web in which the superabsorbent polymer is formed in situ. The '620 patent also does not teach impregnating the

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nonwoven web with an aqueous superabsorbent polymer precursor composition and drying the aqueous superabsorbent polymer precursor composition to form superabsorbent polymer. It is well established that where process steps impart distinct structural characteristics, those process steps must be considered.

The structure implied by the process steps should be considered when assessing the patentability of product-by-process claims over the prior art especially where the product can only be defined by the process steps by which the product is made, or where the manufacturing process steps would be expected to impart distinctive structural characteristics to the final product.

M.P.E.P. 2113 *citing In re Garnero*, 412 F.2d 276, 279 (CCPA 1979). In the present case, the product that results from impregnating a web with an aqueous superabsorbent polymer precursor composition and drying the composition to form a superabsorbent polymer is inherently different from the article produced by the method disclosed in the '620 patent. In particular, a superabsorbent polymer formed by impregnating a nonwoven web with an aqueous superabsorbent polymer precursor composition forms as a polymer throughout the three dimensional matrix of the web including in the interstices of the nonwoven web and along the fibers of the web. The process language of claim 44 thus imparts distinctive structural characteristics to the article of claim 44 and must be given weight.

The absorbent layer of the '620 patent, in contrast, is made by combining superabsorbent polymer particles and fibers and then forming the mixture into a layer using a wet or dry process (see, e.g., the '620 patent, col. 14, line 21-col. 16, line 15). The wet-laid process described by the '620 patent involves entraining a predetermined amount of a slurry that includes a solvent/water-based suspension of fiber, particulate and superabsorbent polymer on a conveyor (e.g., of wire mesh). The superabsorbent polymer exists prior to the formation of the layer of the '620 patent. In addition, once the solvent and water of the slurry dry, the superabsorbent polymer particles remain as discrete particles in the composite of the '620 patent. The superabsorbent polymer of the '620 patent is not present as a polymer impregnate and it is not present throughout the three dimensional matrix of the nonwoven web including along the fibers and in the interstices of the nonwoven web. For at least these additional reasons, the '620 patent fails to teach

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the disposable diaper of claim 44. Accordingly, the rejection of claim 44 under 35 U.S.C. § 102(b) over the '620 patent cannot stand and must be withdrawn.

Claims 2-10, 18-20, 26-30, 32-34, 37, 42, 43, 45 and 47 are distinguishable under 35 U.S.C. § 102(b) over the '620 patent for at least the same reasons set forth above in distinguishing claim 44.

We further note that the '620 patent does not teach a melt blown high loft nonwoven web impregnated with superabsorbent polymer, where the nonwoven web includes fibers consisting of polyester, polypropylene, polyethylene and combinations thereof as required by new claim 48. Accordingly, claim 48 is also patentable over the '620 patent.

Claims 11-17, 21-25, 31, and 39 stand rejected under 35 U.S.C. § 103 over the '620 patent.

The rejection of claims 11-17, 21-25, and 31 is based upon the above-refuted premise that the '620 patent teaches the disposable article of claim 44. Since this premise has been refuted, the rejection of claims 11-17, 21-25, and 31 under 35 U.S.C. § 103 over the '620 patent cannot stand and must be withdrawn for at least the same reasons set forth above in distinguishing claim 44.

Applicant further submits that new claim 46 (former claim 38) and claim 39 are distinguishable under 35 U.S.C. § 103 over the '620 patent for at least the same reasons set forth above in distinguishing claim 44.

Claim 35 stands rejected under 35 U.S.C. § 103 over the '620 patent in view of U.S. Patent No. 5,788,684 (the '684 patent).

The description of the '620 patent set forth above is incorporated herein.

The '684 patent describes a liquid absorbing article that includes holes that extend through the depth of the absorbent core. The holes are at least partially filled with a high absorbency material.

Claim 35 depends from claim 44 and further recites that the core includes a plurality of strips of the composite. The deficiencies of the '620 patent set forth above are incorporated herein. The '684 patent does not cure the deficiencies of the '620 patent. The '684 patent does not teach or suggest a high loft nonwoven web including a superabsorbent polymer throughout the three dimensional matrix of the nonwoven web

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including along fibers of the nonwoven web and in interstices of the nonwoven web, nor does it teach or suggest a nonwoven web in which the superabsorbent polymer is formed in situ in the nonwoven web by impregnating the nonwoven web with an aqueous superabsorbent polymer precursor composition and drying the aqueous superabsorbent polymer precursor composition to form superabsorbent polymer. Thus, the proposed combination of the '620 patent and the '684 patent lacks a required element of claim 35. Accordingly, the rejection of claim 35 under 35 U.S.C. § 103 over the '620 patent in view of the '684 patent is unwarranted and Applicant requests that it be withdrawn.

The claims now pending in the application are in condition for allowance and such action is respectfully requested. The Examiner is invited to telephone the undersigned should a teleconference interview facilitate prosecution of this application.

Please charge any additional fees owing or credit any over payments made to Deposit Account No. 06-2241.

Respectfully submitted,

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